

Amendments to the Claims

Please amend claims 11-17 and 19, and add new claim 22.

1 – 10. (Canceled)

11. (Currently Amended): A system for debugging in more than one programming language, comprising:

a multi-language debugger, ~~with the capability to debug wherein the multi-language debugger debugs a source code file which contains multiple nested languages, wherein the multi-language debugger interprets multiple languages that are nested in a single source file, and wherein the multiple nested languages can include both~~ compiled and interpreted languages;

a script engine interface, wherein a script engine communicates to the multi-language debugger through the script engine interface;

a script debug controller, wherein the script debug controller registers itself upon start-up; ~~wherein the multi-language debugger uses a standardized interface for a script engine, wherein all communications with the script engine will be through calls to the script debug controller;~~

a script context object, wherein the script engine can use the script context object to hold a script context;

a debuggable frame object, ~~wherein the script engine uses a debuggable frame object to retrieve script context for a supported language, wherein each of the multiple nested languages is displayed in a debuggable frame object, and wherein each of the multiple nested~~ compiled and interpreted languages ~~can be~~ are edited in the debuggable frame object;

an interface to a runtime messaging environment, wherein the interface is implemented by a

runtime messaging environment that controls a running state of the script engine; and
a debug commands interface.

12. (Currently Amended): The system of claim 11, wherein the multi-language debugger is extensible ~~and a user can add language definitions~~ to support additional languages.

13. (Currently Amended): The system of claim 11, wherein the multi-language debugger uses a Debugging Interface.

14. (Currently Amended): The system of claim 11, wherein ~~if more than one language appears on a stack, a user can see a debuggable frame for each language and the user can inspect variables~~ are inspected for each language.

15. (Currently Amended): A system, comprising:
a multi-language debugger, wherein the multi-language debugger debugs a source code file
which contains compiled and interpreted languages;
a script engine interface, wherein a script engine communicates to the multi-language
debugger through the script engine interface;
a script debug controller;
a debuggable frame object, wherein each of the compiled and interpreted languages can be
edited in the debuggable frame object;
an interface to a runtime messaging environment, wherein the interface is implemented by a
runtime messaging environment that controls a running state of the script engine;

a debug commands interface; and

~~The system of claim 11, further comprising:~~

a proxy, wherein the proxy is used between the executing code being debugged and the multi-language debugger to consolidate contents of one or more messages.

16. (Currently Amended): The system of claim 15, wherein the script engine interface ~~is~~ can be used by the multi-language debugger to communicate metadata to the proxy.

17. (Currently Amended): The system of claim 11, wherein the multi-language debugger interacts with the runtime messaging environment.

18. (Previously Presented): The system of claim 17, wherein debugging is performed on a server side of the runtime messaging environment.

19. (Currently Amended): The system of claim 18, wherein the runtime messaging environment ~~interprets language interactions and~~ performs debugging using a Platform Debugging Architecture.

20. (Previously Presented): The system of claim 11, wherein the script engine has a static constructor load the script debug controller.

21. (Previously Presented): The system of claim 20, wherein the script debug controller receives information from the script engine, comprising:

- a) language extensions for each language;
- b) classes that implement the script engine;
- c) information on optional capabilities for each language; and
- d) language name.

22. (New): A system, comprising:

a multi-language debugger, wherein the multi-language debugger debugs a source code file which contains compiled and interpreted languages;

a script engine interface, wherein a script engine communicates to the multi-language debugger through the script engine interface;

a script debug controller;

a script context object, wherein the script engine uses the script context object to hold a script context;

a debuggable frame object, wherein each of the compiled and interpreted languages can be edited in the debuggable frame object;

an interface to a runtime messaging environment, wherein the interface is implemented by a runtime messaging environment that controls a running state of the script engine;

a proxy, wherein the proxy is used between the executing code being debugged and the multi-language debugger to consolidate contents of one or more messages; and

a debug commands interface.